

[54] PARASITE-DERIVED RESISTANCE

[57]

ABSTRACT

A method for conferring resistance to a parasite to a host of the parasite, which comprises isolating a gene fragment from the parasite and inserting the gene fragment or a DNA or RNA segment substantially homologous to the gene fragment or to a DNA or RNA sequence functionally equivalent to the gene fragment into the host, wherein (1) transcription of the gene fragment or the DNA or RNA segment in the host occurs in an anti-sense direction, (2) the gene fragment or the DNA or RNA segment is expressed as a gene product in the host, wherein the gene product is capable of disrupting an essential activity of the parasite, or (3) the gene fragment or the DNA or RNA segment is a binding site capable of competing with a native binding site in the parasite, is disclosed along with hosts produced by this process. Particularly preferred is conferring resistance using a gene fragment from a replicase gene of an RNA virus.

21 Claims, 1 Drawing Sheet